

主催：日本歯科理工学会関東地方会

共催：日本歯科理工学会・日本歯科材料器械研究協議会

学術講演会

歯科材料器械の国際標準化に向けて

講師

Dr. Hilde M Kopperud

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Dr. Robert J Kelly

Professor, Department of Reconstructive Sciences,
Center for Biomaterials, University of Connecticut
Health Center

座長

今里 聡 (日本歯科理工学会標準化委員会)

日時

平成25年9月27日(金) 15:00～17:00

場所

東京医科歯科大学1号館西9階 特別講堂

〒113-8510 東京都文京区湯島1-5-45

受講費

無料

懇親会

17:30～19:30

東京医科歯科大学構内 レストラン「あるめいだ」

会費：3,000 円

連絡先

日本歯科理工学会関東地方会

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Efforts for International Standardization of Dental Materilas and Devices

European perspectives on standardization of dental materials

Hilde Molvig Kopperud, Dr. scient.

Head of laboratory, NIOM - Nordic Institute of Dental Materials, OSLO, Norway

Synopsis: The talk will present the European perspectives on standardization of dental materials, as seen from a Norwegian representative. Nordic Institute of Dental Materials (NIOM) has been involved in standardization work within ISO and CEN (European Committee for Standardization) for many years, having experts and conveners present in ISO/TC 106 Dentistry, as well as ISO/TC 194 Biological evaluation of medical devices and the European equivalents (CEN/TC 55 and CEN/TC 206). NIOM will be presented with its research project and test facilities which have been important for the development of dental standards. Laboratory studies on physical, chemical and biological properties of dental materials will be supplemented with clinical evaluations in the near future. Perspectives on the present medical device directive (MDD) in Europe and the future medical device regulations (MDR) will also be presented, followed by some thoughts on the topic regulation vs. standardization. Some examples of standards development will be given, considering the recent trends of materials, equipment and test methods.



Critical Perspectives on Standards and In Vitro Research Methodologies

Robert J Kelly, DDS, MS, DMedSc

Professor, Department of Reconstructive Sciences, Center for Biomaterials
University of Connecticut Health Center, USA

Synopsis: Standards activities in dentistry began during the 1920's at the National Bureau of Standard in Washington, DC due to the War Department's problematic experience with dental amalgam during World War I. Work continued at the Bureau, under private sponsorship, driven by a desire to improve the dimensional tolerances of castings as well as by an increasing frustration with the quality of data and information on dental materials in everything from advertising, conference lectures and textbooks. This early work did much to improve in vitro testing and the consistency and quality of dental materials and devices. Today, emphasis is increasingly on the development of standardized tests that predict clinical behavior. Many in vitro research methods have become so familiar as to have escaped critical thinking regarding their meaning for providing insights into clinical behavior. Among these are microleakage testing, bulk failure of prostheses, wear tests, surrogate measures of translucency and bond strength testing. Aspects of each of these will be examined with an eye towards whether critical features of clinical performance are indeed being mimicked.



The Japanese Society for Dental Materials and Devices
Japan Research Council on Dental Products

September 27, 2013 at TMDU

- NOTE -

Biographical sketch

Dr. Hilde Molvig Kopperud, Dr. scient.

She received doctorate from the University of Oslo, Norway, from 2001, within the field of polymer chemistry.

Dr. Robert J Kelly, DDS, MS, DMedSc

He teaches graduate prosthodontics and biomaterials and is Director, Center for Advanced Technology Integration at the University of Connecticut Health Center. His academic credentials include the D.D.S. (The Ohio State University), an M.S. in dental materials science (Marquette University), the D.Med.Sc. in oral biology and a Certificate in prosthodontics (Harvard University/MIT). He has served on the Council on Scientific Affairs of the American Dental Association (ADA), is Convener of the International Standardization Organization working group responsible for dental ceramics, Vice Chairman of the ADA Standards Committee on Dental Products, Vice President of the Academy of Dental Materials, and Past-President of the American Academy of Fixed Prosthodontics. Dr. Kelly has received awards for biomedical research (Harvard), research and post-graduate education (Assoc. Military Surgeons of the U.S.) and as a clinician/scholar (Amer. College of Prosthodontists). He has contributed to dental, engineering, and medical literature, holds five patents, frequently lecturers before national and international dental and engineering organizations, still does some of his own porcelain and keeps his fingers wet practicing fixed prosthodontics.